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APPLICATION NUMBER	FILING/RECEIPT DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NO./TITLE
09/278,238	03/19/99	GOODWIN	J 003829.P003

0262/0408

MICHAEL J MALLIE
BLAKELEY SOKOLOFF TAYLOR & ZAFMAN
12400 WILSHIRE BOULEVARD
7TH FLOOR
LOS ANGELES CA 90025

NOT ASSIGNED

2731

DATE MAILED: 04/08/99

NOTICE TO FILE MISSING PARTS OF APPLICATION
Filing Date Granted

An Application Number and Filing Date have been assigned to this application. The items indicated below, however, are missing. Applicant is given TWO MONTHS FROM THE DATE OF THIS NOTICE within which to file all required items and pay any fees required below to avoid abandonment. Extensions of time may be obtained by filing a petition accompanied by the extension fee under the provisions of 37 CFR 1.136(a). **If any of items 1 or 3 through 5 are indicated as missing, the SURCHARGE set forth in 37 CFR 1.16(e) of ☐ $65.00 for a small entity in compliance with 37 CFR 1.27, or ☑ $130.00 for a non-small entity, must also be timely submitted in reply to this NOTICE to avoid abandonment.**

If all required items on this form are filed within the period set above, the total amount owed by applicant as a ☐ small entity (statement filed) ☑ non-small entity is $ 130.00.

☐ 1. The statutory basic filing fee is:
- ☐ missing.
- ☐ insufficient.

Applicant must submit $_____ to complete the basic filing fee and/or file a small entity statement claiming such status (37 CFR 1.27).

☐ 2. The following additional claims fees are due:

$_____ for _____ total claims over 20.

$_____ for _____ independent claims over 3.

$_____ for multiple dependent claim surcharge.

Applicant must either submit the additional claim fees or cancel additional claims for which fees are due.

☑ 3. The oath or declaration:
- ☑ is missing or unsigned.
- ☐ does not cover the newly submitted items.

An oath or declaration in compliance with 37 CFR 1. 63, including residence information and identifying the application by the above Application Number and Filing Date is required.

☐ 4. The signature(s) to the oath or declaration is/are by a person other than inventor or person qualified under 37 CFR 1.42, 1.43 or 1.47.
A properly signed oath or declaration in compliance with 37 CFR 1.63, identifying the application by the above Application Number and Filing Date, is required.

☐ 5. The signature of the following joint inventor(s) is missing from the oath or declaration:

_____

An oath or declaration in compliance with 37 CFR 1.63 listing the names of all inventors and signed by the omitted inventor(s), identifying this application by the above Application Number and Filing Date, is required.

☐ 6. **A $50.00 processing fee is required since your check was returned without payment (37 CFR 1.21(m)).**

☐ 7. Your filing receipt was mailed in error because your check was returned without payment.

☐ 8. The application was filed in a language other than English.
Applicant must file a verified English translation of the application, the $130.00 set forth in 37 CFR 1.17(k), unless previously submitted, and a statement that the translation is accurate (37 CFR 1.52(d)).

☐ 9. OTHER:_____

Direct the reply and any questions about this notice to "Attention: Box Missing Parts."

A copy of this notice MUST be returned with the reply.

Customer Service Center
Initial Patent Examination Division (703) 308-1202

FORM PTO-1533 (REV. 9/98) U.S. GPO: 1998–446-824

PART 3 - OFFICE COPY

L14 0 FILE WPIDS
L15 0 FILE USPATFULL

TOTAL FOR ALL FILES
L16 6 L8 AND (IMMUNOSUPPRESS? AGENT OR CYCLOSPORINE)

=> dup rem l16
PROCESSING COMPLETED FOR L16
L17 4 DUP REM L16 (2 DUPLICATES REMOVED)

=> d cbib abs 1-4

L17 ANSWER 1 OF 4 BIOSIS COPYRIGHT 1997 BIOSIS DUPLICATE 1
95:307739 Document No.: 98322039. Histological and endocrinological investigations of cyclosporine effects on the rat testis.. Iwasaki M; Fuse H; Katayama T. Dep. Urol., Fac. Med., Toyama Med. Pharm. Univ., 2630 Sugitani, Toyama 930-01, Japan Andrologia, 27 (3). 1995. 185-189. ISSN: 0303-4569. Language: English
AN 95:307739 BIOSIS
AB To investigate the effects of cyclosporine on spermatogenesis and endocrinological function of the testis, cyclosporine was administered subcutaneously to mature male Sprague-Dawley rats. Four and 6 weeks after the termination of cyclosporine administration (40 or 60 mg kg-1), the diameter of seminiferous tubules was diminished. The percentage of tubules with spermatozoa was decreased 6 weeks after the termination of cyclosporine treatment (20 apprx 60 mg kg-1). However, tubular wall thickness did not change throughout the experiment. Serum follicular stimulating hormone level increased significantly immediately after termination of cyclosporine administration dose-dependently, while the serum levels' luteinizing hormone and testosterone did not alter throughout the experiment. It is strongly suggested that cyclosporine impairs spermatogenesis and Sertoli cell function, although Leydig cell function is not injured.

L17 ANSWER 2 OF 4 EMBASE COPYRIGHT 1997 ELSEVIER SCI. B.V.
93134489 EMBASE Sertoli cell-enriched fractions in successful islet cell transplantation. Selawry H.P.; Cameron D.F.. Veterans Affairs Medical Center, Research 151, 1030 Jefferson Avenue, Memphis, TN 38104, United States. CELL TRANSPLANT. 2/2 (123-129) 1993.
ISSN: 0963-6897. CODEN: CTRAE8. Pub. Country: United States. Language: English. Summary Language: English.
AB Prolonged survival of Islet- allo- and xenografts can be induced

following implantation of the islets into the abdominal testis of diabetic rats. We previously showed that a factor released by Sertoli cells appears to be responsible for the protection of the intratesticular islet allo- and xenografts against rejection. The aim of this study was to examine whether an immunologically privileged site can be established in an organ site in vivo, other than the testis, such as the renal, subcapsular space, to make feasible the grafting of female recipients as well. A total of 36 male and 21 female, diabetic, PVG rats were divided into six different treatment groups: 1) Six male rats were grafted with islets from Sprague-Dawley (S-D) donor rats only. 2) Ten male rats were grafted with islets from (S-D) donors and were then given a short course of cyclosporine (CsA) posttransplantation. 3) Ten male rats were grafted with islets from (S-D) donors and with Sertoli cell-enriched fractions (SEF) from PVG donors but without CsA. 4) Ten male rats were grafted with a combination of islets from (S-D) and SEF from (PVG), donors, respectively, and CsA. 5) Ten female rats were given an identical combination of cells and CsA as depicted for group 5. 6) Ten female rats were grafted with a combination of islets and SEF, both cell types from S-D donors, and CsA. The results showed that 70% to 100% of the grafted rats in groups 1, 2, and 3 remained hyperglycemic. Prolonged normoglycemia in excess of 100 days was induced in more than 75% of the grafted rats only in groups 4, 5, and 6, or in those animals who were grafted with a combination of islets and SEF and who were given a short course of CsA as well. Electron microscopic examination of the grafted tissues showed the presence of intact beta cells and of cells with features characteristic of Sertoli cells. Our results suggest that 1) the protection of islet allografts in nonimmunologically privileged site can be achieved in male and female rats by means of the simultaneous transplantation of Sertoli cells. 2) Sertoli cells apparently maintain the capacity to secrete an immune inhibitor in organ sites other than the testis. We conclude that it is feasible to create an immunologically privileged site for the transplantation of isolated islets in male and female diabetic recipients without the need for sustained immunosuppression.

L17 ANSWER 3 OF 4 EMBASE COPYRIGHT 1997 ELSEVIER SCI. B.V.
85001553 EMBASE Effects of drugs and chemicals on spermatogenesis.
Neumann F.. Research Laboratories of Schering AG, Department of Endocrine Pharmacology, 1000 Berlin 65, Germany, Federal Republic of. ARCH. TOXICOL. 55/SUPPL. 7 (109-117) 1984.
CODEN: ARTODN. Pub. Country: Germany, Federal Republic of. Language:

English.

AB Many drugs and chemicals have been found which interfere with the process of spermatogenesis. Among these substances are, for example, sex-hormones (androgens, antiandrogens, estrogens, progestogens, anabolics), chemotherapeutics, antibiotics, antifungal drugs, anticancer drugs, nonsteroidal antiinflammatory drugs, antihypertensives, neuroleptics, dopaminantagonists, indols, tranquilizers, tricyclic antidepressives, heavy metals (Co, Cd), MAO-inhibitors, antimetabolites, barbiturates, immunosuppressives (glucocorticoids), aldosteronantagonists, anticonvulsives, and perhaps alcohol and nicotine. Concerning the mechanism by which spermatogenesis is effected several points of interference have to be considered: inhibition of gonadotrophin secretion, inhibition of enzymes involved in androgen biosynthesis, direct effects on the germinal epithelium or on Sertoli cell function, competitive inhibition of hormone action, damage of the blood-testes barrier and other mechanisms. Some of these mechanisms will be discussed.

L17 ANSWER 4 OF 4 EMBASE COPYRIGHT 1997 ELSEVIER SCI. B.V.

75146041 EMBASE The management of the infertile male. De Kretser D.M.. MRC, Prince Henry's Hosp., Melbourne, Australia.
CLIN.OBSTET.GYNAECOL. 1/2 (409-427) 1974.
CODEN: XXXXXB. Language: English.

AB The treatment of the infertile male remains disappointing to date, no doubt due to inadequate understanding of the problem. Nevertheless, such a patient should be carefully assessed even though the outcome may establish the presence of irreversible sterility. Such an evaluation can spare the patient and his wife considerable cost and anxiety and prevent the far too frequent multiple consultation of doctors. Tact, compassion and explanation can help the sterile male to realise that his role as a husband is not compromised despite sterility, thereby preventing needless strain on the marital unit.

=> dis his

(FILE 'HOME' ENTERED AT 15:24:49 ON 12 SEP 1997)

FILE 'CA, CAPLUS, BIOSIS, MEDLINE, EMBASE, WPIDS, USPATFULL'
ENTERED AT 15:25:09 ON 12 SEP 1997

L1 992 FILE CA
L2 997 FILE CAPLUS
L3 1526 FILE BIOSIS
L4 1207 FILE MEDLINE

Searched By: Mary Hale 308-4258

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L5          1300 FILE EMBASE
L6             7 FILE WPIDS
L7           124 FILE USPATFULL
     TOTAL FOR ALL FILES
L8          6153 S SERTOL? CELL AND (BIOLOG? FACTOR OR HORMONE OR DIABETES
L9             0 FILE CA
L10            0 FILE CAPLUS
L11            1 FILE BIOSIS
L12            1 FILE MEDLINE
L13            4 FILE EMBASE
L14            0 FILE WPIDS
L15            0 FILE USPATFULL
     TOTAL FOR ALL FILES
L16            6 S L8 AND (IMMUNOSUPPRESS? AGENT OR CYCLOSPORINE)
L17            4 DUP REM L16 (2 DUPLICATES REMOVED)

=> s l8 and (transplant? or xenograft or allograft or renal subcapsult? or
subcutan? facie)
L18            6 FILE CA
L19            6 FILE CAPLUS
L20            9 FILE BIOSIS
L21           13 FILE MEDLINE
L22           11 FILE EMBASE
L23            3 FILE WPIDS
L24           15 FILE USPATFULL

TOTAL FOR ALL FILES
L25           63 L8 AND (TRANSPLANT? OR XENOGRAFT OR ALLOGRAFT OR RENAL SUB
                 CAPSULT? OR SUBCUTAN? FACIE)

=> s l25 not l16
L26            6 FILE CA
L27            6 FILE CAPLUS
L28            9 FILE BIOSIS
L29           13 FILE MEDLINE
L30           10 FILE EMBASE
L31            3 FILE WPIDS
L32           15 FILE USPATFULL

TOTAL FOR ALL FILES
L33           62 L25 NOT L16

=> dup rem l33
PROCESSING COMPLETED FOR L33
L34            36 DUP REM L33 (26 DUPLICATES REMOVED)
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Searched By: Mary Hale 308-4258

=> d cbib abs 1-36

L34 ANSWER 1 OF 36 USPATFULL
97:76108 Use of mullerian inhibiting substance for treating certain tumors and for modulating class I major histocompatibility antigen expression.
Donahoe, Patricia K., Weston, MA, United States
Chin, Tai Wai, Taipei, Taiwan, Province of China
Parry, Robert L., Silver Spring, MD, United States
Epstein, James, Boston, MA, United States
Ragin, Richard C., Boston, MA, United States
MacLaughlin, David T., Sangus, MA, United States
Barksdale, Edward M., Cincinnati, OH, United States
The General Hospital Corporation, Boston, MA, United States (U.S. corporation)
US 5661126 970826
APPLICATION: US 94-271252 940707 (8)
DOCUMENT TYPE: Utility.

AB This application concerns the treatment of certain tumors using an effective amount of the glycoprotein Mullerian Inhibiting Substance (MIS). This application further concerns the treatment of certain tumors using an effective amount of the C-terminal fragment of MIS. Also, this application concerns DNA sequences encoding the C-terminal fragment of MIS, vectors containing the DNA sequence and transformed host cells capable of producing the C-terminal fragment. This application further concerns treating certain tumors by transfecting tumor cells with a gene coding for MIS or the C-terminal fragment of MIS. Gene therapy treatments for inhibiting growth of certain tumors are also provided. Further, this application concerns a method for modulating class I histocompatibility antigens with MIS and EGF.

L34 ANSWER 2 OF 36 USPATFULL
97:66235 Afamin: a human serum albumin-like gene.
Lichenstein, Henri Stephen, Ventura, CA, United States
Lyons, David Edwin, Thousand Oaks, CA, United States
Wurfel, Mark Matsuo, New York, NY, United States
Wright, Samuel Donald, Larchmont, NY, United States
Amgen Inc., Thousand Oaks, CA, United States (U.S. corporation)The Rockfeller University, New York, NY, United States (U.S. corporation)
US 5652352 970729
APPLICATION: US 94-222619 940331 (8)
DOCUMENT TYPE: Utility.

Searched By: Mary Hale 308-4258

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention relates to a novel human serum protein and nucleic acid referred to as AFM, which has one or more activities in common with human serum albumin, human a-fetoprotein, or human vitamin D binding protein and which has an apparent molecular weight by SDS-PAGE of 87 kd; variants thereof; and related genes, vectors, cells and methods.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L34 ANSWER 3 OF 36 USPATFULL

97:64098 Serine/threonine kinase and nucleic acids encoding same.

Dennis, James W., Etobicoke, Canada
Heffernan, Mike, Toronto, Canada
Fode, Carol, Toronto, Canada
Mount Sinai Hospital Corporation, Toronto, Canada (non-U.S. corporation)
US 5650501 970722
APPLICATION: US 94-252995 940602 (8)
DOCUMENT TYPE: Utility.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A serine/threonine kinase protein which is associated with mitotic and meiotic cell division and which is characterized by having a kinase domain in its N-terminus and three PEST regions in the C-terminus, and nucleic acid molecules encoding the protein. Diagnostic and therapeutic methods using the serine/threonine kinase protein and nucleic acid molecules are also described.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L34 ANSWER 4 OF 36 USPATFULL

97:59050 Therapy and diagnosis of conditions related to telomere length and/or telomerase activity.

West, Michael D., San Carlos, CA, United States
Harley, Calvin B., Palo Alto, CA, United States
Strahl, Catherine M., San Francisco, CA, United States
McEachern, Michael J., San Francisco, CA, United States
Shay, Jerry, Dallas, TX, United States
Wright, Woodring E., Arlington, TX, United States
Blackburn, Elizabeth H., San Francisco, CA, United States
Vaziri, Homayoun, Toronto, Canada
Board of Reagents, The University of Texas System, Dallas, TX, United States (U.S. corporation)The Reagents of the University of California, Oakland, CA, United States (U.S. corporation)Geron Corporation, Menlo Park, CA, United States (U.S. corporation)

US 5645986 970708
APPLICATION: US 93-153051 931112 (8)
DOCUMENT TYPE: Utility.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Method and compositions are provided for the determination of telomere length and telomerase activity, as well as the ability to increase or decrease telomerase activity in the treatment of proliferative diseases. Particularly, primers are elongated under conditions which minimize interference from other genomic sequences, so as to obtain accurate determinations of telomeric length or telomerase activity. In addition, compositions are provided for intracellular inhibition of telomerase activity and means are shown for slowing or reversing the loss of telomeric repeats in aging cells.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L34 ANSWER 5 OF 36 USPATFULL
97:38416 Hybridomas producing antibodies to cardiac hypertrophy factor.
Baker, Joffre, El Granada, CA, United States
Chien, Kenneth, La Jolla, CA, United States
King, Kathleen, Pacifica, CA, United States
Pennica, Diane, Burlingame, CA, United States
Wood, William, San Mateo, CA, United States
Genentech, Inc., United States (U.S. corporation)The Regents of the University of California, United States (U.S. corporation)
US 5627073 970506
APPLICATION: US 95-443129 950517 (8)
DOCUMENT TYPE: Utility.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Isolated CHF (also referred to cardiac hypertrophy factor or cardiotrophin-1), isolated DNA encoding CHF, hybridomas and cell lines producing antibodies to CHF, and recombinant or synthetic methods of preparing CHF are disclosed. These CHF molecules are shown to influence hypertrophic activity and neurological activity. Accordingly, these compounds or their antagonists may be used for treatment of heart failure, arrhythmic disorders, inotropic disorders, and neurological disorders.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L34 ANSWER 6 OF 36 USPATFULL
97:36156 Clearing agents useful in pretargeting methods.
Axworthy, Donald B., Brier, WA, United States
Reno, John M., Brier, WA, United States

NeoRx Corporation, Seattle, WA, United States (U.S. corporation)
US 5624896 970429
APPLICATION: US 95-462765 950605 (8)
DOCUMENT TYPE: Utility.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Novel clearing agents are provided which comprise biotin analog containing clearance-directing moieties. Preferably such clearance-directing moieties endogenously contain or a rederivatized to expose galactose and/or mannose residues.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L34 ANSWER 7 OF 36 USPATFULL
97:36067 Antibodies to cardiac hypertrophy factor and uses thereof.
Baker, Joffre, El Granada, CA, United States
Chien, Kenneth, La Jolla, CA, United States
King, Kathleen, Pacifica, CA, United States
Pennica, Diane, Burlingame, CA, United States
Wood, William, San Mateo, CA, United States
Genentech, Inc., South San Francisco, CA, United States (U.S. corporation)The Regents of the University of California, Oakland, CA, United States (U.S. corporation)
US 5624806 970429
APPLICATION: US 95-442745 950517 (8)
DOCUMENT TYPE: Utility.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Isolated CHF, isolated DNA encoding cardiac hypertrophy factor (CHF), and recombinant or synthetic methods of preparing CHF are disclosed. These CHF molecules are shown to influence hypertrophic activity and neurological activity. Accordingly, these compounds or their antagonists may be used for treatment of heart failure, arrhythmic disorders, inotropic disorders, and neurological disorders.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L34 ANSWER 8 OF 36 USPATFULL
97:27275 Hexose derivatized human serum albumin clearing agents.
Axworthy, Donald B., Brier, WA, United States
Reno, John M., Brier, WA, United States
NeoRx Corporation, Seattle, WA, United States (U.S. corporation)
US 5616690 970401
APPLICATION: US 93-133613 931008 (8)
DOCUMENT TYPE: Utility.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Novel clearing agents comprising hexose derivatized human serum albumin and ligand molecule(s) are provided. These clearing agents are useful in pretargeting methods to clear previously administered anti-ligand containing conjugates. Preferably, the hexose is mannose or galactose and the ligand and anti-ligand are respectively biotin and avidin or streptavidin.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L34 ANSWER 9 OF 36 CA COPYRIGHT 1997 ACS DUPLICATE 1
126:135688 Use of co-localized islets and Sertoli cells in xenograft cellular transplants.
Selawry, Helena P. (Research Corporation Technologies, Inc., USA). PCT Int. Appl. WO 9640178 A1 961219, 109 pp. DESIGNATED STATES: W: AU, CA, JP, MX, NO; RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE. (English). CODEN: PIXXD2. APPLICATION: WO 96-US9627 960607. PRIORITY: US 95-485340 950607.
AB The present invention describes a method of treating a disease that results from a deficiency of a biol. factor which comprises administering to a mammal Sertoli cells and cells that produce the biol. factor. In particular, the present invention describes a method of treating diabetes mellitus by transplanting pancreatic islet of Langerhans cells in conjunction with Sertoli cells to create an immunol. privilege site. A method of creating an immunol. privileged site and providing cell stimulatory factors in a mammal for transplants further described by the present invention. A method of co-localizing islet cells with Sertoli cells and the use of the co-localized product treating diabetes mellitus is further provided. The present invention further describes a method of creating systemic tolerance to foreign antigens. A method of enhancing the viability, maturation, proliferation of functional capacity of cells in tissue culture is further provided. A pharmaceutical compn. comprising Sertoli cells and cells that produce a biol. factor is also provided.

L34 ANSWER 10 OF 36 WPIDS COPYRIGHT 1997 DERWENT INFORMATION LTD
AN 96-485771 [48] WPIDS
AB WO 9633264 A UPAB: 961202
A purified and isolated sertoli cell aggregate which is:
(a) capable of survival in situ after transplantation

;

(b) able to provide immuno-protection for co-transplanted cells, and

(c) able to provide a mechanism for prolonged viability and functionality of the transplanted cells, is new.

Also claimed is a purified and isolated cell aggregate which comprising an aggregate of a secretory cell and an immunoprotective cell, which is:

(a') as (a) above;

(b') capable of maintaining a secretory function in response to in-situ stimuli, and

(c') capable of effectively avoiding in situ immune surveillance.

USE - The cells can be used for various curative, diagnostic and maintenance providing functions. The secretory cells can be, e.g. insulin producing islet cells for the treatment of insulin dependent diabetes and chromaffin cells for the treatment of Parkinson's disease.

ADVANTAGE - The method allows the transplantation of cells which can avoid rejection and survive indefinitely.

Dwg.0/3

L34 ANSWER 11 OF 36 USPATFULL

96:108662 Three-step pretargeting methods using improved biotin-active agent.

Theodore, Louis J., Lynnwood, WA, United States

Reno, John M., Brier, WA, United States

Gustavson, Linda M., Seattle, WA, United States

Neorx Corporation, Seattle, WA, United States (U.S. corporation)

US 5578287 961126

APPLICATION: US 93-156614 931123 (8)

DOCUMENT TYPE: Utility.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Methods, compounds, compositions and kits that relate to pretargeted delivery of diagnostic and therapeutic agents are disclosed. In particular, three-step pretargeting methods are described.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L34 ANSWER 12 OF 36 USPATFULL

96:101657 Cardiac hypertrophy factor.

Baker, Joffre, El Granada, CA, United States

Chien, Kenneth, La Jolla, CA, United States

King, Kathleen, Pacifica, CA, United States

Pennica, Diane, Burlingame, CA, United States
Wood, William, San Mateo, CA, United States
Genentech, Inc., South San Francisco, CA, United States (U.S. corporation) Regents of the Univ. of California, Oakland, CA, United States (U.S. corporation)
US 5571893 961105
APPLICATION: US 94-286304 940805 (8)
DOCUMENT TYPE: Utility.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Isolated CHF, isolated DNA encoding CHF, and recombinant or synthetic methods of preparing CHF are disclosed, These CHF molecules are shown to influence hypertrophic activity and neurological activity. Accordingly, these compounds or their antagonists may be used for treatment of heart failure, arrhythmic disorders, inotropic disorders, and neurological disorders.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L34 ANSWER 13 OF 36 USPATFULL
96:101443 Detection and amplification of candiotrophin-1(cardiac hypertrophy factor).
Baker, Joffre, El Granada, CA, United States
Chien, Kenneth, La Jolla, CA, United States
King, Kathleen, Pacifica, CA, United States
Pennica, Diane, Burlingame, CA, United States
Wood, William, San Mateo, CA, United States
Genentech, Inc., South San Francisco, CA, United States (U.S. corporation) Regents of the Univ. of California, Oakland, CA, United States (U.S. corporation)
US 5571675 961105
APPLICATION: US 95-444083 950517 (8)
DOCUMENT TYPE: Utility.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Isolated CHF, isolated DNA encoding CHF, and recombinant or synthetic methods of preparing CHF are disclosed. These CHF molecules are shown to influence hypertrophic activity and neurological activity. Accordingly, these compounds or their antagonists may be used for treatment of heart failure, arrhythmic disorders, inotropic disorders, and neurological disorders.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L34 ANSWER 14 OF 36 USPATFULL
96:68105 Pretargeting methods and compounds.
Yau, Eric K., Kirkland, WA, United States

Theodore, Louis J., Lynnwood, WA, United States
Gustavson, Linda M., Seattle, WA, United States
NeoRx Corporation, Seattle, WA, United States (U.S. corporation)
US 5541287 960730
APPLICATION: US 94-345811 941122 (8)
DOCUMENT TYPE: Utility.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Methods, compounds, compositions and kits that relate to pretargeted delivery of diagnostic and therapeutic agents are disclosed. In particular, methods for radiometal labeling of biotin, as well as related compounds, are described. Articles of manufacture useful in pretargeting methods are also discussed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L34 ANSWER 15 OF 36 USPATFULL
96:60798 Cardiac hypertrophy factor and uses therefor.
Baker, Joffre, El Granada, CA, United States
Chien, Kenneth, La Jolla, CA, United States
King, Kathleen, Pacifica, CA, United States
Pennice, Diane, Burlingame, CA, United States
Wood, William, San Mateo, CA, United States
Genentech, Inc., South San Francisco, CA, United States (U.S. corporation)The Regents of the University of California, Oakland, CA, United States (U.S. corporation)
US 5534615 960709
APPLICATION: US 94-233609 940425 (8)
DOCUMENT TYPE: Utility.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Isolated CHF, isolated DNA encoding CHF, and recombinant or synthetic methods of preparing CHF are disclosed. These CHF molecules are shown to influence hypertrophic activity and neurological activity. Accordingly, these compounds or their antagonists may be used for treatment of heart failure, arrhythmic disorders, inotropic disorders, and neurological disorders.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L34 ANSWER 16 OF 36 USPATFULL
96:11055 Therapy and diagnosis of conditions related to telomere length and/or telomerase activity.
West, Michael D., Belmont, CA, United States
Shay, Jerry, Dallas, TX, United States
Wright, Woodring, Arlington, TX, United States
University of Texas System Board of Regents, Austin, TX, United

States (U.S. corporation)
US 5489508 960206
APPLICATION: US 93-38766 930324 (8)
DOCUMENT TYPE: Utility.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Method and compositions are provided for the determination of telomere length and telomerase activity, as well as the ability to inhibit telomerase activity in the treatment of proliferative diseases. Particularly, primers are elongated under conditions which minimize interference from other genomic sequences, so as to obtain accurate determinations of telomeric length or telomerase activity. In addition, compositions are provided for intracellular inhibition of telomerase activity.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L34 ANSWER 17 OF 36 CA COPYRIGHT 1997 ACS DUPLICATE 2
124:279632 Effect of hypophysectomy, sex of host, and/or number of transplanted testes on Sertoli cell number and testicular size of syngeneic testicular grafts in Fischer rats. Johnson, Larry; Suggs, Lisa C.; Norton, Yvonne M.; Welsh, Thomas H., Jr.; Wilker, Clynn E. (Department Veterinary Anatomy and Public Health, Texas A&M University, College Station, TX, 77843-4458, USA). Biol. Reprod., 54(5), 960-9 (English) 1996. CODEN: BIREBV. ISSN: 0006-3363.
AB One or more neonatal testicular grafts were transplanted for 60-65 days into young adult inbred Fischer rats to det. the effect of hypophysectomy, sex of host, and/or the no. of transplanted testes on testicular size and Sertoli cell no. All host rats had been castrated or ovariectomized and some were hypophysectomized as well. At the end of the treatment, testes were fixed and embedded in Epon before histol. sections (0.5 .mu.m or 20 .mu.m) were evaluated by stereol. Testicular grafts placed in castrated adult male rats with intact pituitaries weighed more and had more Sertoli cells than those placed in hypophysectomized hosts. Testicular grafts that were recovered from hypophysectomized rats 34 days post-transplantation and placed in pituitary-intact males for 30 days had larger parenchymal wts. and more Sertoli cells than did testes retransplanted into hypophysectomized rats. However, this delayed period of Sertoli cell proliferation did not extend to 65 days of hypophysectomy. When two or four testes were transplanted into castrated males or ovariectomized female hosts for 65 days, there was no difference in the graft wts. or

Sertoli cell nos. between sexes. Four transplanted testes per rat produced more total testicular parenchyma and a greater no. of Sertoli cells per testis than did two testes regardless of sex of the host. This model has shown that the period of Sertoli cell proliferation can be delayed by hypophysectomy, that Sertoli cell no. can be influenced by endogenous hormones, and that a major component in regulation of testicular size is at the level of the testis in this model. Hence, this model should facilitate study of exptl. endocrine manipulation control and potential exptl. intervention to increase Sertoli cell no. and testicular size.

L34 ANSWER 18 OF 36 CA COPYRIGHT 1997 ACS DUPLICATE 3

124:280101 Effect of developmental age or time after transplantation on sertoli cell number and testicular size in inbred Fischer rats. Johnson, Larry; Suggs, Lisa C.; Norton, Yvonne M.; Zeh, Wayne C. (College Veterinary Medicine, Faculty Toxicology Texas A&M University, College Station, TX, 77843-4458, USA). Biol. Reprod., 54(5), 948-59 (English) 1996. CODEN: BIREBV. ISSN: 0006-3363.

AB The objectives were to establish the developmental age of Fischer rats at which the Sertoli cell no. is stabilized, to establish the normal ref. plateau no. of Sertoli cells for evaluation of testes after transplantation, and to det. whether the developmental pattern establishing Sertoli cell proliferation and stability are similar between intact and transplanted testes. Sertoli cell no. was detd. at ages 10-120 days in intact rats and at various times (10-90 days) after transplantation of prenatal or neonatal testes. Testes were fixed by vascular perfusion or by immersion with 2% glutaraldehyde and immersion in 15 osmium and were embedded in Epon 812. Sections and serial sections were cut at 0.5 .mu.m to det. the Sertoli cell nuclei vol. d. and the vol. of an individual Sertoli cell nucleus by bright-field microscopy or at 20 .mu.m to det. the max. height and width of nuclei. A correction factor was calcd. for intact (0.663) or for transplanted (0.558) testes to det. the vol. of a single Sertoli cell nucleus from height and width measurements. In intact testes, Sertoli cell nos. significantly increased to Day 20 but were not different between 15 and 90 days. Sertoli cell no. in prenatal or neonatal transplanted testes increased to 20 or 30 days post-transplantation and then stabilized to Day

60 or 90. There was no difference in the plateau no. of Sertoli cells per rat between prenatal and neonatal testes. Sertoli cells in 10-day- and 30-day-transplanted testes incorporated [3H]thymidine when placed in culture. A few tubules had complete spermatogenesis at 90 days post-transplantation, indicating that Sertoli cells in some of these tubules were functional. Leydig cell structure appeared to be normal. Leukocytic infiltration of testes was not obsd. in intact rats or in rats receiving neonatal testes. Although transplanted testes showed a delay in reaching the plateau value for Sertoli cell no. per testis and although the value reached was lower, the developmental pattern of Sertoli cell proliferation in transplanted testes was similar to that in intact rats.

L34 ANSWER 19 OF 36 MEDLINE DUPLICATE 4

97044140 Sertoli cell-induced defects on functional and structural characteristics of isolated neonatal porcine islets. Selawry H P; Wang X; Alloush L. (Department of Veterans Affairs Medical Center, Memphis, TN 38104, USA.)CELL TRANSPLANTATION, (1996 Sep-Oct) 5 (5) 517-24. Journal code: B02. ISSN: 0963-6897. Pub. country: United States. Language: English.

AB A lack of a sufficient number of human donor pancreases has stimulated interest in isolation and cryopreservation techniques for islets from the porcine pancreas. But because of a poorly developed outer membrane porcine islets are particularly susceptible to damage during cryopreservation. The aims of this study were two-fold: 1) to develop a method for isolation and storage of islets from neonatal porcine pancreas and, 2) to examine effects of Sertoli cells on islet yield and function in Sertoli cell-islet cell cocultures. A total of 170 neonatal porcine pancreases were processed by means of a short period of digestion with collagenase and culture of the tissues at 32 degrees C for periods up to 7 days following isolation. Results were: The mean +/- SEM, number of viable islets, and percentage loss of cells following 7 days of culture were 29,442 +/- 1,119 and 22.2 +/- 1.2, respectively, Cryopreservation had a marked impact on recovery of viable islets: In absence of Sertoli cells an average of only 64% of islets remained viable; by contrast, when cryopreserved islets were cocultured with Sertoli cells, a mean of 82% was recovered. Glucose at 16.7 mmol/L had the capacity to elicit insulin release from 3-day-old cultured islets. The concentration in absence of Sertoli cells was 57.3 +/- 3.8 uU/mL/10 islets; in the presence of Sertoli cells the level increased to a mean +/-

SEM of 112.8 +/- 17.7, uU/mL/10 islets. Similar results were obtained following cryopreservation: glucose at 16.7 mmol/L stimulated a mean +/- SEM of 27.9 +/- 6.6, uU/mL/10 islets, of insulin in absence of, and 44.9 +/- 9.9, uU/mL/10 islets, in presence of, Sertoli cells. Our results show that isolation and cryopreservation of neonatal porcine islets can be successfully accomplished. In addition, coculture with Sertoli cells significantly improves both the yield and functional capacity of islets following cryopreservation.

L34 ANSWER 20 OF 36 WPIDS COPYRIGHT 1997 DERWENT INFORMATION LTD
AN 95-382736 [49] WPIDS
AB WO 9528167 A UPAB: 951211
The following are claimed: (A) treatment of diseases that result from a deficiency of a biological factor in mammals, comprising admin. of Sertoli cells (in amts. effective to create an immunologically privileged site (IPS)) and cells which produce the biological factor. (B) creation of an IPS in mammals, comprising transplanting of isolated Sertoli cells into the mammal. (C) enhancing recovery and proliferation of ex vivo cells, comprising co-culturing the cells with Sertoli cells. (D) compsns. comprising (a) a carrier, (b) Sertoli cells, and opt. (c) cells which produce a biological factor. (E) compartmentalised kit adapted to receive (a) a first container adapted to contain Sertoli cells and (b) a second container adapted to contain cells that produce a biological factor. (F) article of mfr. comprising a packaging material and Sertoli cells contained within the packaging material. The Sertoli cells are effective for creating an IPS in a mammal. The packaging material contains a label that indicates that the Sertoli cells can be used for creating an IPS in a mammal.

USE - Process (A) is esp. useful for treatment of diabetes, and related complications.

ADVANTAGE - Process (A) allows reaction of an IPS by transplanting Sertoli cells into a non-testicular site. The IPS allows transplantation of cells that produce biological factors such as insulin. It avoids many of the problems associated with the current therapies for chronic diseases that destroy the functional cells of vital organs.
Dwg.0/12

L34 ANSWER 21 OF 36 USPATFULL

Searched By: Mary Hale 308-4258

95:36376 Therapeutic compositions comprising nucleoproteins as the active agents, and methods of producing and using such compositions.
Calabrese, Alberto I., 7292 Av. del Libertador, 10th Fl. "A", 1429 Buenos Aires, Argentina
Calabrese, Santiago I. E., 1961 Olazabal St. PB, 1428 Buenos Aires, Argentina
Nakasone, Juan, 384 Nother St., 1846 Adrogue, Province of Buenos Aires, Argentina
US 5409901 950425
APPLICATION: US 89-442489 891127 (7)
PRIORITY: AR 87-308044 870702
DOCUMENT TYPE: Utility.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to the production of nucleoproteins, more especially DNA, and their use in therapeutic compositions suitable for the treatment of neoplasms, pathological conditions, infections, osteoarticular disorders and the like, which comprise said nucleoproteins as active agent.

Similarly, the invention comprises compositions which protect against the harmful effects of radiation and poisons in general, which also comprise said nucleoproteins as active agent.

Finally, the present invention relates to a method for treating patients suffering from neoplasms and the like, whereby therapeutically effective quantities of said compositions are administered to the patient.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L34 ANSWER 22 OF 36 CA COPYRIGHT 1997 ACS DUPLICATE 5
123:161535 Immunohistochemical detection of the expression of the .alpha. subunit of inhibin, TGF-.beta., basic-FGF and IGF-II in fetal ovarian grafts grown with fetal testes beneath the kidney capsule of adult castrated male rats. Koike, Satoshi; Noumura, Tetsuo (Faculty of Science, Saitama University, Urawa, 338, Japan). J. Exp. Zool., Volume Date 1995, 272(4), 319-28 (English) 1995. CODEN: JEZOAO. ISSN: 0022-104X.

AB To characterize the participation of growth factors in gonadal differentiation and development, the authors examd. patterns of expression of the .alpha. subunit of inhibin, transforming growth factor-.beta. (TGF-.beta.), basic fibroblast growth factor (basic FGF) and insulin-like growth factor-II (IGF-II) immunohistochem. in exptl. induced ovotestis. Ovotestes were derived from ovaries of fetal rats on gestational day (GD) 13 that

had been co-grafted with fetal testes (GD 17) beneath the kidney capsule of adult castrated males and examd. on the 7th, 14th and 21st days after transplantation (TD). Reactivity with antibodies against the .alpha. subunit of inhibin and basic FGF was obsd. in the Sertoli cells in both ovotestes and testes on TD 14 and on TD7, 14 and 21, resp. Expression of IGF-II was also recognized in the Leydig/interstitial cells in both types of graft on TD 14 and 21. Therefore, the gonadal somatic cells in the testicular region of the ovotestes had immunohistochem. properties similar to those in the cografted testes. However, the somatic cells in the ovarian region of the ovotestes had immunohistochem. profiles different from those in solitary grafted ovaries. The germ cells in the ovotestes showed some differences in patterns of expression when compared with those in cografted testes and solitary grafted ovaries: expression of basic FGF was recognized in the germ cells in ovotestes on TD 21 but not in co-grafted testes; expression of IGF-II was recognized in the germ cells in ovotestes on TD 21 but not in solitary grafted ovaries. These results indicate that the immunohistochem. properties that reflect expression of growth factors in female gonadal somatic cells were changed to properties that resemble those of male gonads by the co-grafted fetal testes.

L34 ANSWER 23 OF 36 BIOSIS COPYRIGHT 1997 BIOSIS DUPLICATE 6

96:69166 Document No.: 98641301. The marsupial male: A role model for sexual development.. Renfree M B; Harry J L; Shaw G. Dep. Zool., Univ. Melbourne, Parkville, VIC 3052, Australia Philosophical Transactions of the Royal Society of London B Biological Sciences, 350 (1333). 1995. 243-251. ISSN: 0962-8436. Language: English

AN 96:69166 BIOSIS

AB Sexual differentiation in male marsupials has many similarities with that of eutherians. Marsupials have an XX-XY sex determining mechanism, and have a homologue of the testis-determining SRY gene on their Y-chromosome. However, the development pattern of SRY gene expression is different from the mouse in that it is expressed for a much longer period. SRY is expressed in a range of non-gonadal tissues in male pouch young and adults which is similar to the human pattern, and raises questions as to its particular role(s) in sexual differentiation. Similarly Mullerian inhibiting substance (MIS) is produced in the developing testis over a longer period than in the mouse. Since ovaries cultured with MIS or transplanted into male recipient pouch young develop tubular structures. MIS may induce Sertoli cell formation. Testosterone is produced by the neonatal testis, and this stimulates Wolffian duct development to form the vas deferens and epididymis. Virilization of urogenital

sinus is also androgen-dependent. However, virilization of the prostate and phallus occurs more than three weeks after the onset of testosterone production, suggesting that the timing of this may be regulated by delayed activation of the androgen receptor pathway. Unlike in eutherians, differentiation of the scrotum and mammary glands is not dependent on testicular hormones, but is independently regulated by an X-linked genetic mechanism. Clearly marsupials provide a unique perspective to help us clarify the mechanisms underlying sexual development in all mammals.

L34 ANSWER 24 OF 36 MEDLINE

93289983 Action of estradiol and tamoxifen on the Mullero-regressive activity of the chick embryonic testis assayed in vivo by organotypic grafting. Stoll R; Ichas F; Faucounau N; Maraud R. (Faculte de Medecine Paul Broca, Laboratoire d'Histo-Embryologie, Universite Bordeaux II, France..)ANATOMY AND EMBRYOLOGY, (1993 Apr) 187 (4) 379-84. Journal code: 4PK. ISSN: 0340-2061. Pub. country: GERMANY: Germany, Federal Republic of. Language: English.

AB In the chick, the implantation of a testis graft from a 13-day-old male donor embryo into the extra-embryonic coelom of 3-day-old female embryos induces the total regression of their Mullerian ducts because of the anti-Mullerian hormone (AMH or MIS) secreted by the implant. Pre-treatment of the donors with estradiol (E2), between day 12 and day 13, counteracts in a significant way the Mullero-regressive activity of the implant. Co-treatment of donors at the same stage with both Tamoxifen (TAM) and E2 restores the initially observed activity, thus demonstrating the presence of Tamoxifen-sensitive estrogen receptors at the late stage of treatment in the Sertoli cells responsible for AMH secretion. The treatment of 3-day-old male donor embryos with E2 causes the differentiation of their left gonad into an ovotestis which provides implants totally devoid of Mullero-regressive activity. The additional treatment with TAM of the grafted host embryos, does not modify the results obtained when E2-treated male gonads are grafted to host embryos not treated with TAM. This shows that the lack of Mullero-regressive activity exhibited by the E2-treated male gonads does not depend on the estrogens they may secrete during the time of the assay, i.e., it cannot be attributed to a protecting action of estrogens on the MDs of the host. Our results therefore favor the idea that E2 down-regulates AMH. The relevance of such a regulation to the phenomenon of Mullerian duct maintenance, either in the E2-feminized male or in the female chick embryo, is discussed.

L34 ANSWER 25 OF 36 BIOSIS COPYRIGHT 1997 BIOSIS DUPLICATE 7

Searched By: Mary Hale 308-4258

93:408680 Document No.: BA96:74405. ELEVATED SERUM IMMUNOREACTIVE INHIBIN LEVELS IN PERIPUBERTAL BOYS WITH CHRONIC RENAL FAILURE. MITCHELL R; SCHAEFER F; MORRIS I D; SCHARER K; SUN J G; ROBINSON W R; COOP STUDY GROUP PUBERTAL DEV CHRONIC RENAL FAILURE. DEP. MED., CLINICAL SCI. BUILD., HOPE HOSPITAL, ECCLES OLD RD., SALFORD M6 8HD, UK. CLIN ENDOCRINOL, 39 (1). 1993. 27-33. CODEN: CLECAP; ISSN: 0300-0664. Language: English

AN 93:408680 BIOSIS

AB Objective: Boys with chronic renal failure have delayed progress through puberty and have raised gonadotrophin and low testosterone levels indicative of disturbed hypothalamo-pituitary-testicular function. Most studies into the mechanisms underlying the dysfunction have concentrated on the LH-Leydig cell interaction. However, it is now possible to probe the FSH-Sertoli cell axis by measuring plasma immunoreactive inhibin, which is a marker of Sertoli cell function. This study investigated the FSH-Sertoli cell (immunoreactive inhibin) axis in boys with chronic renal failure on conservative and dialysis treatment as they progressed through puberty. The effect of renal transplantation in chronic renal failure was also investigated. Design: Blood was drawn at 15-minute intervals between 2000 and 0700 h from 51 boys with chronic renal failure at various stages of puberty. The samples were divided into two pools, corresponding to the hormone secretion in the first and second part of the night. Single blood samples were drawn from a group of normal boys between 0800 and 1000 h. Patients: A total of 37 normal boys and 51 boys with chronic renal failure were examined immediately before and during puberty. Of a total of 80 pulse profiles taken in chronic renal failure, 36 were from transplanted and 44 from non-transplanted uremic subjects. Measurements: Immunoreactive inhibin, FSH and testosterone were measured using standard radioimmunoassays. The subjects were pooled into pubertal stages I, II/III and IV/V for analysis of hormone data. Results: Early morning levels of immunoreactive inhibin like molecules (i-Inh) rose steadily with pubertal progression for all subject groups, those for boys with chronic renal failure being significantly elevated over normal boys from pubertal stage II/III onwards. Uremic boys had higher levels than those who had been transplanted at all pubertal stages ($P < 0.05$). Early morning levels of FSH were significantly higher in uremic patients with pubertal stages IV/V compared to our normal boys. There were no differences in i-Inh levels in plasma pooled from the samples taken between 2000 and 0115h and 0130 and 0700 h for either treatment group at any stage of puberty. Testosterone levels rose in the second part of the profile from pubertal stages II/III onwards for both

treatment groups. The proportional increase in testosterone was lower my mid puberty in uremic than in transplanted children (percentage increases of 92 .+-. 29 and 569 .+-. 190 respectively, mean .+-. SEM). i-Inh failed to correlate with FSH at any Tanner stage or for any subject group. Conclusion: Peripubertal boys with chronic renal failure have highly elevated serum immunoreactive inhibin and FSH levels which are partially reduced by renal transplantation. There was no evidence of any relationship between i-Inh and FSH secretion in either normal boys or in uremic or transplanted boys with the exception of a positive correlation in late pubertal patients after transplantation . Finally, despite problems associated with the current immunoassay for inhibin, this assay may still prove to be a useful marker of Seroli cell function in testicular pathology.

L34 ANSWER 26 OF 36 CA COPYRIGHT 1997 ACS DUPLICATE 8

119:136877 Muellerian inhibiting substance production associated with loss of oocytes and testicular differentiation in the transplanted mouse XX gonadal primordium. Taketo, Teruko; Saeed, Jamilah; Manganaro, Tom; Takahashi, Masahiko; Donahoe, Patricia K. (Dep. Biol., McGill Univ., Montreal, PQ, H3A 1A1, Can.). Biol. Reprod., 49(1), 13-23 (English) 1993. CODEN: BIREBV. ISSN: 0006-3363.

AB The mouse XX gonadal primordium develops seminiferous-like tubules after transplantation into the renal subcapsular site of the adult male or female mouse. The authors examd. the ontogeny of Sertoli cell differentiation in XX gonadal grafts by immunocytochem. staining and organ culture bioassay for Muellerian Inhibiting Substance (MIS). During normal in situ development of the XY gonad, MIS staining was first detected in fetal Sertoli cells at 12 days of gestation (d.g.) and remained intense until 4 days postpartum (d.pp.), after which it gradually diminished with progressive testicular development. In the normal in situ XX gonad, MIS was detected in granulosa cells of growing follicles at 7 d.pp. and thereafter. When the XX gonad at 12 d.g. was grafted beneath the renal capsule, a few testicular cords composed of MIS-pos. cells appeared on Day 7 post-transplantation (equiv. to 19 d.g.), much earlier than the normal appearance of MIS prodn. in the intact XX ovary. The ovarian region contg. germ cells at the meiotic prophase was unstained for MIS in the same sections. The incidence of XX gonadal grafts contg. MIS-pos. testicular cords and the no. of such cords per gonadal graft steadily increased from Day 7 to Day 14. post-transplantation. Germ cells were absent or scarce inside the MIS-pos. testicular cords. The MIS bioactivity in both control

gonads and gonadal grafts coincided with the immunocytochem. staining for MIS. These results support the hypothesis that XX cells differentiate into Sertoli cells as a consequence of oocyte loss in the gonadal graft.

L34 ANSWER 27 OF 36 BIOSIS COPYRIGHT 1997 BIOSIS DUPLICATE 9
92:96787 Document No.: BA93:53337. PRODUCTION OF A FACTOR OR FACTORS SUPPRESSING IL-2 PRODUCTION AND T CELL PROLIFERATION BY SERTOLI CELL-ENRICHED PREPARATIONS. SELAWRY H P; KOTB M; HERROD H G; LU Z-N. VAMC, RES. 151, 1030 JEFFERSON AVE., MEMPHIS, TENN. 38104. TRANSPLANTATION (BALTIMORE), 52 (5). 1991. 846-850. CODEN: TRPLAU; ISSN: 0041-1337. Language: English
AN 92:96787 BIOSIS
AB Isolated islet allografts survive indefinitely in the abdominal testis of nonimmunosuppressed diabetic rats. The predominant feature of these testes is that the presence of Sertoli cells, but not Leydig cells, is required for extended survival of the islet allografts. Sertoli cell cultures were therefore established in vitro and we examined the effects of the conditioned media on Con A-stimulated spleen lymphocyte proliferation. These studies revealed that a product(s) secreted by Sertoli cells inhibits Con A-stimulated lymphocyte proliferation in a dose-dependent manner. The synthesis of this product is both temperature-dependent, occurring predominantly at 37.degree. C, and hormone-dependent, requiring the presence of follicle stimulating hormone, in the culture medium. We further examined the mechanism of inhibition of lymphocyte proliferation and showed that Sertoli cell-enriched media inhibit the production of IL-2 in a dose-dependent manner. Furthermore, the finding that the addition of exogenous IL-2 is not able to reverse this inhibition indicates that the Sertoli cell -enriched media inhibit both IL-2 production and IL-2 responsiveness of T lymphocytes.

L34 ANSWER 28 OF 36 CA COPYRIGHT 1997 ACS DUPLICATE 10
114:240837 Rat tumor Leydig cells as a test system for the study of Sertoli cell factors that stimulate steroidogenesis. Verhoeven, Guido; Cailleau, Jean (Dep. Dev. Biol., Onderwijs en Navorsing, Louvain, B-3000, Belg.). J. Androl., 12(1), 9-17 (English) 1991. CODEN: JOAND3. ISSN: 0196-3635.
AB Transplantable rat Leydig cell tumor H-540 was used to study the interactions between Leydig and Sertoli cells. These tumor cells maintain their steroidogenic capacity when cultured. Their responsiveness to a no. of agonists

that affect normal Leydig cells is markedly changed. Steroidogenesis can no longer be stimulated by LH (LH), but the cells remain responsive to dibutyrylcyclic adenosine monophosphate (dbcAMP) and cholera toxin. Cultured cells mainly produce C21-steroids, but the ability to produce androgens can be restored by pretreatment with dbcAMP. Co-culture with Sertoli cells increases steroidogenesis in H-540 cells, and this effect is enhanced by FSH (FSH). Expts. with a two-chamber culture system show that these effects are mediated by one or more diffusible factors, some of which may be short-acting. SCF, a Sertoli cell-derived factor that stimulates normal Leydig cells, is not the mediator in this system since it is unable to stimulate steroidogenesis in Leydig tumor cells. Immunoneutralization expts. show that insulin-like growth factor I (IGF-I) is a permissive factor required to maintain steroidogenesis in Leydig tumor monocultures and in co-cultures with Sertoli cells, but addn. of IGF-I does not mimic the stimulatory effect of co-culture. It was concluded that factors other than SCF and IGF-I must be involved in the stimulatory effects of co-culture, and that H-540 cells may be a useful tool for the study of these factors.

L34 ANSWER 29 OF 36 BIOSIS COPYRIGHT 1997 BIOSIS
90:275564 Document No.: BR39:7410. SUPPRESSION OF GONADOTROPINS IN SHORT AND LONG TERM CASTRATES BY TESTOSTERONE VERSUS MICROSURGICALLY TRANSPLANTED TESTICULAR ISOGRAFTS. YOUNG G P H; GOLDSTEIN M; SUNDARAM K; THAU R; ADLER H; BARDIN C W. NEW YORK, N.Y., USA. AMERICAN UROLOGICAL ASSOCIATION EIGHTY-FIFTH ANNUAL MEETING, NEW ORLEANS, LOUISIANA, USA, MAY 13-17, 1990. J UROL, 143 (4 SUPPL.). 1990. 264A. CODEN: JOURAA; ISSN: 0022-5347. Language: English
AN 90:275564 BIOSIS

L34 ANSWER 30 OF 36 EMBASE COPYRIGHT 1997 ELSEVIER SCI. B.V.
89266933 EMBASE Transplantation of newborn rat testis under the kidney capsule of adult host as a model to study the structure and function of Leydig cells. Kuopio T.; Savouras P.O.; Pelliniemi L.J.; Huhtaniemi I.T.. Department of Anatomy, University of Turku, 20520 Turku, Finland. J. ANDROL. 10/5 (335-345) 1989. ISSN: 0196-3635. CODEN: JOAND3. Pub. Country: United States. Language: English.

L34 ANSWER 31 OF 36 BIOSIS COPYRIGHT 1997 BIOSIS DUPLICATE 11
89:318425 Document No.: BA88:32155. TRANSPLANTATION AND SUBSEQUENT RECOVERY OF SMALL AMOUNTS OF ISOLATED LEYDIG CELLS. VAN DAM J H; TEERDS K J; ROMMERTS F F G. DEP. BIOCHEM. II, ERASMUS UNIV.

Searched By: Mary Hale 308-4258

ROTTERDAM, ROTTERDAM, NETH. ARCH ANDROL, 22 (2). 1989. 123-130. CODEN: ARANDR; ISSN: 0148-5016. Language: English

AN 89:318425 BIOSIS

AB A technique is described for transplantation of a few million Leydig cells in a gelatin sponge. Within 7 days after subcutaneous transplantation in the neck, a spongeous tissue develops within the gelatin matrix. This tissue contains Leydig cells, fibroblasts, and blood vessels. Isolated Leydig cells were recovered after collagenase dispersion of this tissue. Steroid production by these isolated cells can be stimulated by LH, but the response is less than with fresh Leydig cells isolated directly from testicular tissue. The biochemical properties of Leydig cells devoid of surrounding Sertoli cells can be applied to long-term studies.

L34 ANSWER 32 OF 36 BIOSIS COPYRIGHT 1997 BIOSIS DUPLICATE 12

88:266671 Document No.: BA86:5915. IN-VITRO MALIGNANT TRANSFORMATION OF IN-VIVO ENU-INDUCED RAT OVARIAN SERTOLI CELL TUMOR ADENOMA. STOICA G; O'LEARY M. DEP. VETERINARY PATHOL., TEXAS A AND M UNIV., COLLEGE STATION, TX 77843, USA. J CANCER RES CLIN ONCOL, 114 (2). 1988. 142-148. CODEN: JCROD7; ISSN: 0171-5216. Language: English

AN 88:266671 BIOSIS

AB An N-ethyl-N-nitrosourea-induced rat ovarian Sertoli cell tumor was grown in tissue culture in Dulbecco's modified Eagle's medium (DMEM) supplemented with 25% horse serum (HS) and a hormone combination of 20 ng/ml each of hydrocortisone, insulin, and prolactin. This tissue culture derived from a nonsteroid hormone-producing tumor. Cytofluorometry and karyotyping of the nonhormone-producing tumor cell ine (SCTL-1) revealed a diploid pattern for the early passage (P1), which become hyperdiploid (P10), and then aneuploid (P20). These cells had an epitheloid pattern, grew in a monolayer at early passages. After P10 the cells were transplanted into newborn rats and nude mice and resulted in high incidences of tumors (up to 100%). The cell line (SCTL-1) continued to grow in DMEM, 10% HS, and no hormone supplementation after P10. This study revealed that a benign rat ovarian Sertoli cell tumor after multiple passages in vitro underwent sequential genotypic and phenotypic changes and became highly malignant.

L34 ANSWER 33 OF 36 MEDLINE

88089975 Mouse ovarian tumors--a review including classification and induction of neoplastic lesions and description of several previously unreported types. Liebelt A G; Sass B; Lombard L S.

(Registry of Experimental Cancers, NIH, Bethesda, MD 20892..)JOURNAL OF EXPERIMENTAL PATHOLOGY, (1987 Spring) 3 (2) 115-45. Ref: 77. Journal code: JEX. ISSN: 0730-8485. Pub. country: United States. Language: English.

AB The purpose of this study is to review the pertinent literature on the incidence, methods of induction and pathogenesis of ovarian tumors of mice. Strains of mice with a high incidence of spontaneously occurring granulosa cell tumors (gct) and tubular adenomas (ta) are the C3HeB/Fe and C3HeB/De; strain HAN:NMRI developed Sertoli cell tumors and (DBA x Ce)F1 hybrids had a high incidence gct. Ninety-five percent of hybrid (C57BL/6J x C3H/HeJ)F1 WxWv mice which lack germ cells develop complex tubular adenomas. Strain LT, in which a high percentage of ovarian ova develop parthenogenetically, develops has a high incidence of teratomas. The use of hormones, castration and transplantation of the ovaries in a number of inbred strains results in a high incidence of ovarian tumors; in strain Maf/Sp gct and luteomas were induced in 82%. Irradiation with gamma rays produced a similar incidence of ovarian tumors in (C57L x A)F1 hybrids. The chemical inducing the highest incidence (92%) of ovarian tumors of mice is 9,10 Dimethyl 1,2 benzanthracene (DMBA). Recently, 4-Vinylcyclohexene was shown to induce a high incidence of ovarian tumors. A number of rare ovarian tumors were reported. Described are five androblastomas composed of either Leydig or Sertoli cells or a combination of the two cell types and a single undifferentiated androblastoma. Seven teratomas were described, three of which contained large amounts of neural tissue; another was classified as a teratoma with a parieto-visceral yolk-sac carcinoma component.

L34 ANSWER 34 OF 36 MEDLINE DUPLICATE 13

84237269 Development of "granulosa" cell tumors from intrasplenic testicular transplants in castrated ACI rats. Kojima A; Yamashita K; Tsutsui K; Ishii S. GANN, (1984 Feb) 75 (2) 159-65. Journal code: FGJ. ISSN: 0016-450X. Pub. country: Japan. Language: English.

AB A day-old testis was transplanted into the spleen of one-month-old castrated ACI male rats. For the first six months, diffuse hyperplasia of the interstitial cells was conspicuous with progressive deletion of spermatogenic cells in the seminiferous tubules. Then multiple foci of hyperplastic nodules started to appear, mainly near the tunica albuginea, in all castrated rats, but never in noncastrated rats. These nodular tissues gradually fused together (so-called Leydig cell tumors) and at about 12 months, other distinct tumor foci, morphologically indistinguishable from

ovarian granulosa cell tumors, developed in and replaced the nodular tissues. The specific binding of follicle stimulating hormone to the "granulosa" cell tumor tissues was demonstrated. The hypothesis is presented that Sertoli cells were involved in the hyperplastic nodules and ultimately gave rise to the "granulosa" cell tumors.

L34 ANSWER 35 OF 36 BIOSIS COPYRIGHT 1997 BIOSIS DUPLICATE 14
83:318694 Document No.: BA76:76186. MICRO SURGICAL TRANSPLANTATION OF TESTES IN ISOGENIC RATS METHOD AND FUNCTION. GOLDSTEIN M; PHILLIPS D M; SUNDARAM K; YOUNG G P H; GUNSALUS G L; THAU R; BARDIN C W. POPULATION COUNCIL, 1230 YORK AVE., NEW YORK, N.Y. 10021. BIOL REPROD, 28 (4). 1983. 971-982. CODEN: BIREBV; ISSN: 0006-3363. Language: English

AN 83:318694 BIOSIS

AB A newly developed technique for the orthotopic transplantation of rat testes employs end-to-side anastomoses of a renal artery or a 1-mm aortic patch to the recipient's aorta. The testicular vein is anastomosed to the vena cava of the recipient using 16-30 .times. magnification and 22-.mu.m diameter sutures in these procedures. The structure and function of 19 testicular isografts and 4 groups of controls which include intact, hemicastrate, sham-operated (also hemicastrate) and bilateral castrates are described. Transplanted testes weighed less than those of intact or hemicastrated rats, but were heavier than sham-operated testes subjected to a similar ischemic insult. The weights of the epididymides and seminal vesicles from transplant recipients did not differ significantly from the 3 groups of controls with testes. Microscopic examination revealed normal-appearing Leydig and Sertoli cells in both transplanted and sham-operated testes. The transplanted testes of animals killed after more than 2 cycles of the seminiferous epithelium showed normal spermatogenesis in many tubules and sperm in the epididymides. Transplants with shorter ischemic insults survived with less tubular damage. The functional capacity of the transplants was judged by radioimmunoassays of hormones and androgen binding protein (ABP) in weekly blood samples. Serum testosterone (T) and ABP levels were virtually identical in transplant recipients and sham-operated animals followed for .gtoreq. 12 wk. Serum concentrations of luteinizing hormone (LH) were slightly higher in transplant recipients compared to sham-operated animals but were still within the normal range. FSH levels rose soon after transplantation and then returned to normal by 8 wk. LHRH stimulation test elicited identical LH and T responses in

control and transplanted animals. A reliable microsurgical method was developed for creating vascularized testicular isografts. Preservation of Leydig and Sertoli cell structure and function in transplants provides a unique model for studies of the hypothalamic-pituitary-testis axis. As transplanted testes are denervated, these animals may be useful for studying neural control of testicular function.

L34 ANSWER 36 OF 36 MEDLINE

72043757 Tissue culture of male mammalian gonads. Steinberger A; Steinberger E. IN VITRO, (1970) 5 17-27. Ref: 34. Journal code: GHD. ISSN: 0073-5655. Pub. country: United States. Language: English.